IN THE CLAIMS

1.   (Currently Amended) A method comprising:

calculating a Theoretical Departure Time (TDT) parameter associated with a

buffer based on an Inter Cell Gap (ICG) parameter, the buffer containing a plurality

of data units;

determining a position of [[a]] said buffer ~~containing a plurality of data units~~ on

a time scale based upon the [[a]] Theoretical Departure Time ~~variable buffer~~

parameter associated with said buffer and a current time counter value; and

modifying a signal prompting selection of said buffer for release of at least one

data unit of said plurality of data units based on said position on said time scale.

2.   (Previously Presented) The method according to claim 1, wherein said

method is implemented in an Asynchronous Transfer Mode Network.

3.   (Currently Amended) The method according to claim 1, wherein said

determining further comprises:

comparing said ~~time~~ TDT parameter of said buffer with said current time

counter value; and

incrementing a counter related to said signal if a difference between said

current time counter value and said ~~time~~ TDT parameter is greater than twice the

value of a predetermined departure parameter.

4.   (Currently Amended) The method according to claim 1, wherein said

determining further comprises:

comparing said ~~time~~ TDT parameter of said buffer with a current time counter value; and

decrementing a counter related to said signal if a difference between said current time counter value and said ~~time~~ TDT parameter is lower than twice the value of a predetermined departure parameter.

5.   (Original) The method according to claim 3, wherein said modifying further comprises:

asserting said signal if said counter reaches a set threshold value.

6.   (Original) The method according to claim 4, wherein said modifying further comprises:

deasserting said signal if said counter reaches a reset threshold value.

7.   (Currently Amended) The method according to claim 1, further comprising:

selecting said buffer for release of said at least one data unit; and

updating said ~~time~~ TDT parameter of said buffer with the ICG parameter associated with the buffer ~~a predetermined departure parameter~~.

8.   (Original) The method according to claim 1, wherein said plurality of data units further comprises cells.

9.   (Currently Amended) A system comprising:

a memory module for storing a plurality of buffers, each buffer containing a plurality of data units; and

a scheduler module for:

calculating a Theoretical Departure Time (TDT) parameter associated with a buffer based on an Inter Cell Gap (ICG) parameter,

determining a position of [[a]] the buffer containing a plurality of data units on a time scale based upon [[a]] the Theoretical Departure Time variable buffer parameter associated with said buffer and a current time counter value, said buffer containing a plurality of data units and

for modifying a signal prompting selection of said buffer for release of at least one data unit of said plurality of data units based on said position on said time scale.

10. (Previously Presented) The system according to claim 9, wherein said system is a line card used in an Asynchronous Transfer Mode Network.

11. (Currently Amended) The system according to claim 9, wherein said scheduler module further compares a time the TDT parameter of said buffer with said current time counter value, and increments a counter related to said signal if a difference between said current time counter value and said time TDT parameter is greater than twice the value of a predetermined departure parameter.

12. (Currently Amended) The system according to claim 9, wherein said scheduler module further compares a time the TDT parameter of said buffer with

said current time counter value, and decrements a counter related to said signal if a difference between said current time counter value and said ~~time~~ TDT parameter is lower than twice the value of a predetermined departure parameter.

13.   (Original) The system according to claim 11, wherein said scheduler module further asserts said signal if said counter reaches a set threshold value.

14.   (Original) The system according to claim 12, wherein said scheduler module further deasserts said signal if said counter reaches a reset threshold value.

15.   (Currently Amended) The system according to claim 9, wherein said scheduler module further selects said buffer for release of said at least one data unit, and updates said ~~time~~ TDT parameter of said buffer with a predetermined departure parameter.

16.   (Original) The system according to claim 9, wherein said plurality of data units further comprises cells.

17.   (Currently Amended) A system comprising:

means for calculating a Theoretical Departure Time (TDT) parameter associated with a buffer based on an Inter Cell Gap (ICG) parameter, the buffer containing a plurality of data units;

means for determining a position of [[a]] said buffer containing a plurality of data units on a time scale based upon the [[a]] Theoretical Departure Time variable buffer parameter associated with said buffer and a current time counter value; and

means for modifying a signal prompting selection of said buffer for release of at least one data unit of said plurality of data units based on said position on said time scale.

18.   (Previously Presented) The system according to claim 17, wherein said system is a line card used in an Asynchronous Transfer Mode Network.

19.   (Currently Amended) The system according to claim 17, further comprising:

means for comparing said time TDT parameter of said buffer with said current time counter value; and

means for incrementing a counter related to said signal if a difference between said current time counter value and said time TDT parameter is greater than twice the value of a predetermined departure parameter.

20.   (Currently Amended) The system according to claim 17, further comprising:

means for comparing said time TDT parameter of said buffer with said current time counter value; and

means for decrementing a counter related to said signal if a difference between said current time counter value and said ~~time~~ TDT parameter is lower than twice the value of a predetermined departure parameter.

21. (Original) The system according to claim 19, further comprising means for asserting said signal if said counter reaches a set threshold value.

22. (Original) The system according to claim 20, further comprising means for deasserting said signal if said counter reaches a reset threshold value.

23. (Currently Amended) The system according to claim 17, further comprising:

means for selecting said buffer for release of said at least one data unit; and

means for updating said ~~time~~ TDT parameter of said buffer with a predetermined departure parameter.

24. (Original) The system according to claim 17, wherein said plurality of data units further comprises cells.

25. (Currently Amended) A computer readable medium containing executable instructions, which, when executed in a processing system, cause said processing system to perform a method comprising:

calculating a Theoretical Departure Time (TDT) parameter associated with a

buffer based on an Inter Cell Gap (ICG) parameter, the buffer containing a plurality

of data units;

determining a position of [[a]] said buffer ~~containing a plurality of data units~~ on

a time scale based upon the [[a]] Theoretical Departure Time ~~variable buffer~~

parameter associated with said buffer and a current time counter value; and

modifying a signal prompting selection of said buffer for release of at least one

data unit of said plurality of data units based on said position on said time scale.

26.   (Previously Presented) The computer readable medium according to

claim 25, wherein said system is a line card used in an Asynchronous Transfer Mode

Network.

27.   (Currently Amended) The computer readable medium according to

claim 25, wherein said determining further comprises:

comparing said ~~time~~ TDT parameter of said buffer with said current time

counter value; and

incrementing a counter related to said signal if a difference between said

current ~~time~~ TDT counter value and said time parameter is greater than twice the

value of a predetermined departure parameter.

28.   (Currently Amended) The computer readable medium according to

claim 25, wherein said determining further comprises:

comparing said ~~time~~ TDT parameter of said buffer with said current time counter value; and

decrementing a counter related to said signal if a difference between said current time counter value and said ~~time~~ TDT parameter is lower than twice the value of a predetermined departure parameter.

29.   (Original) The computer readable medium according to claim 27, wherein said modifying further comprises:

asserting said signal if said counter reaches a set threshold value.

30.   (Original) The computer readable medium according to claim 28, wherein said modifying further comprises:

deasserting said signal if said counter reaches a reset threshold value.

31.   (Currently Amended) The computer readable medium according to claim 25, wherein said method further comprises:

selecting said buffer for release of said at least one data unit; and

updating said ~~time~~ TDT parameter of said buffer with a predetermined departure parameter.

32.   (Original) The computer readable medium according to claim 25, wherein said plurality of data units further comprises cells.

33.   (New) The method according to claim 1, wherein the ICG parameter is a predetermined departure parameter associated with said buffer.